Amendments to the Claims:

1 (currently amended): A computer program product embodied on a computer-readable storage medium and comprising code that, when executed, causes a computing device to perform the following: ~~A computer-readable storage medium having computer-executable components , which when executed rebalance resources, comprising~~:

~~a server component configured to receive~~ receiving from a client computing device at a server component on a server computing device information that indicates the client needs additional resources to perform a transaction, wherein the information received from the client includes a hint about a number of transactions that are currently pending on the client that exceed a maximum number of transactions available limit that was previously negotiated;

the server component being further configured to determine if allocating to the client the additional resources puts the server component in a resource constrained situation, and if so, to rebalance resources currently allocated to a plurality of existing clients; wherein each of the clients is a computing device that maintains information about the state of its allocated resources and pending transactions including a current number of outstanding transaction requests; ~~and a~~ the maximum number of transactions available; and the number of requests that cannot be sent because the current number of outstanding transaction requests equals the maximum number of transactions available, wherein the maximum number of transactions available to each client is initially determined when each of the clients connects to the server at which point a negotiation is performed between the client and the server to establish the maximum number of transactions; wherein the maximum number of transactions specifies a number of transaction requests to be accepted by the server from the client; wherein when the resources are rebalanced by the server by issuing messages to any affected clients to either reduce or increase their maximum transaction available limit.

2 (original): The computer-readable medium of claim 1, wherein the server component executes on a server in a network environment.

3 (original): The computer-readable medium of claim 1, wherein the server component is further configured to allocate the client the additional resources needed if the server determines that such allocation does not create the resource constrained situation.

4 (original): The computer-readable medium of claim 1, wherein the clients and the server component communicate using a light weight input/output protocol.

5 (original): The computer-readable medium of claim 1, wherein the server component determines if the resource constrained situation occurs by comparing a current number of resources allocated to the client with a total number of available resources.

6 (original): The computer-readable medium of claim 5, wherein the determination further comprises comparing a current number of resources allocated to every client connected to the server component with the total number of available resources.

7 (original): The computer-readable medium of claim 6, wherein the determination further comprises comparing the current number of resources allocated to every client connected to the server component and a number of requested resources with the total number of available resources.

8 (original): The computer-readable medium of claim 1, wherein the rebalance of the resources is performed based on an equitable distribution of the resources among the plurality of clients.

9 (original): The computer-readable medium of claim 8, wherein the equitable distribution of the resources is based on a number of clients connected to the server component.

10 (original): The computer-readable medium of claim 9, wherein at least one client connection has a preferential weighting with respect to other clients.

11 (original): The computer-readable medium of claim 8, wherein the equitable distribution of the resources is based on a number of open files associated with each client connected to the server component.

12 (original): The computer-readable medium of claim 11, wherein at least one open file has a preferential weighting with respect to other open files.

13 (currently amended): A computer program product embodied on a computer-readable storage medium and comprising code that, when executed, causes a computing device to perform the following ~~A computer-readable storage medium encoded with a data structure, which is utilized by a program to rebalance resources, comprising~~:

a plurality of data stores, each data store being associated with a different client connection to a server computing device, each data store including:

a credits used field that identifies a number of resource credits currently in use by a client computing device corresponding to the data store;

a credit limit field that identifies a number or resources available to the client corresponding to the data store;

a pending count field that identifies a number of transactions that are pending due to an unavailability of sufficient resources to handle the transactions; and

an open files field that identifies a number of files that are currently in use by the client;

~~wherein the server receives~~ receiving a transaction request message on the server computing device from the client; wherein the transaction request message received from the client includes the number of transactions that are pending due to an unavailability of sufficient resources to handle the transactions that was previously negotiated; wherein the number of resources available to the client that are stored in the credit limit field is a maximum number of transactions available to the client that is initially determined when the client connects to the server at which point a negotiation is performed between the client and the server to establish the maximum number of transactions; and wherein the server rebalances resources when the transaction request places the server in a resource constrained situation; wherein when the

resources are rebalanced, the server issues messages to any affected clients to either reduce or increase their maximum number of transactions that are available.

14 (original): The computer-readable medium of claim 13, wherein the data store further comprises a flag field that identifies whether the corresponding client has acknowledged a resource-related message.

15 (original): The computer-readable medium of claim 13, wherein a value of the pending count field is provided by the client in connection with a transaction request message.

16 (original): The computer-readable medium of claim 15, wherein a value of the credit limit field is modified based on the value of the pending count field.

17 (original): The computer-readable medium of claim 13, wherein values for the credit limit fields of the plurality of data stores is rebalanced based on an equitable distribution of available resources.

18 (currently amended): ~~A computer-readable storage medium having computer-executable components~~ A computer program product embodied on a computer-readable storage medium and comprising code that, when executed, causes a computing device to perform the following ~~which when executed rebalance resources, comprising~~:

a server component configured to: receive information from a client that indicates the client needs additional resources to perform a transaction; wherein the information received from the client includes a number of transactions that are that are pending due to an unavailability of sufficient resources to handle; wherein the number of transactions was previously negotiated; and to rebalance resources currently allocated to the client; wherein when server issues messages to any affected clients when the resources are rebalanced by the server; wherein the messages indicate to either reduce or increase each of the affected clients number of resources.

wherein the client maintains information about the state of its allocated resources and pending transactions within a data structure, comprising:

a credits used field that identifies a number of resource credits currently in use by a client corresponding to the data structure;

a credit limit field that identifies a number or resources available to the client; wherein the number of resources available to the client is initially determined when the client connects to the server at which point a negotiation is performed between the client and the server to establish the number of resources;

a pending count field that identifies [[a]] the number of transactions that are pending due to an unavailability of sufficient resources to handle the transactions; and

a pending queue field that includes transaction messages corresponding to the transactions that are pending.

19 (currently amended): A computer-implemented method embodied on a computer-readable storage medium, that when executed, causes a computing device to perform the following ~~for rebalancing resources, comprising~~:

computing a total number of client connections, each client connection being associated with a client connected to a server, each client having a credit limit that identifies a number of resources that are allocated to the client; wherein the number of resources that are available to client is initially determined when the client connects to the server at which point a negotiation is performed between the client and the server to the number of resources; wherein the client maintains information about the state of its allocated resources including a current number of outstanding credits used and a maximum number of credits available;

computing a total number of pending requests on each client device that identifies a number of transaction requests that are not being handled due to a limitation on resources;

computing a total number of credits in use; and

if the total number of pending requests and the total number of credits in use combined exceeds a total number of available resources, calculating on the server a new credit limit for each of the clients connected to the server; ~~and~~

reallocating the total available resources in accordance with the new credit limits; and issuing messages to affected clients indicating to either reduce or increase their negotiated number of resources.

20 (original): The computer-implemented method of claim 19, wherein the reallocation is based on each client connection receiving a pro rata share of the total available resources.

21 (original): The computer-implemented method of claim 20, wherein the pro rata share of the total available resources is based on the total available resources divided among the total number of client connections.

22 (original): The computer-implemented method of claim 21, wherein the total available resources are divided evenly among the total number of client connections.

23 (original): The computer-implemented method of claim 21, wherein at least one of the client connections is weighted more heavily than another of the client connections.

24 (original): The computer-implemented method of claim 20, wherein the pro rata share for a particular client is based on a proportion of a total number of open files to a number of open files for the particular client.